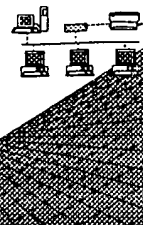BIOTECHNOLOGY
SYSTEMS
BRANCH

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: *10/002,631ß*
Source: *10/PE*
Date Processed by STIC: *2/11/2003*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
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2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
    NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
 PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
 PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
        http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
    User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
    U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
    Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
            Or
    U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
    2011 South Clark Place, Arlington, VA 22202
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    Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/10/002,631B**

DATE: 02/11/2003
TIME: 10:44:56

Input Set : **A:\10002631sequencelisting.txt**
Output Set: **N:\CRF4\02112003\J002631B.raw**

```
 3 <110> APPLICANT: Graff, Jonathon M.
 4         Muenster, Matthew
 6 <120> TITLE OF INVENTION: METHODS TO IDENTIFY SIGNAL SEQUENCES
 9 <130> FILE REFERENCE: A34943 090495.0243
11 <140> CURRENT APPLICATION NUMBER: 10/002,631B
12 <141> CURRENT FILING DATE: 2001-10-31
14 <150> PRIOR APPLICATION NUMBER: 60/300,309
15 <151> PRIOR FILING DATE: 2001-06-21
17 <160> NUMBER OF SEQ ID NOS: 324
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
```

**Does Not Comply
Corrected Diskette Needed**

pp 1, 3-4

ERRORED SEQUENCES

```
2069 <210> SEQ ID NO: 74
2070 <211> LENGTH: 238
2071 <212> TYPE: PRT
2072 <213> ORGANISM: Homo sapiens
2074 <400> SEQUENCE: 74
2075 Cys Cys Phe Val Pro Gly Gln Lys Ile Phe Ala Ala Gln Thr Asp Trp
2076 1               5                   10                  15
2077 Leu Gln Glu Gly Leu Leu Val Trp Thr Trp His His Phe Asp Gln Leu
2078             20                  25                  30
2079 Val His Pro Cys Tyr Arg Ser His Tyr Ser Ser Val His Leu Ser Tyr
2080         35                  40                  45
2081 Trp Thr Val Ser Leu Met Val Pro Leu Leu Trp Ser Pro Phe Val Cys
2082     50                  55                  60
2083 Met Glu Leu Gln Leu Pro Lys Tyr Leu Tyr Ile Leu Leu Arg Lys Asp
2084 65                  70                  75                  80
2085 Phe Ile Thr Leu Thr Ser Ser Thr Leu Pro Arg Ala Gln Lys Lys Pro
2086                 85                  90                  95
2087 Cys Leu Leu Trp Tyr Val Gln Leu His Ser Ser Leu Phe Ala Val Glu
2088             100                 105                 110
2089 His Phe Phe His Ile Ala Pro Ile Leu Leu Ile Arg Ser Gln Arg Glu
2090         115                 120                 125
2091 Cys Phe Phe Ser Ile Leu Glu His Ser Met Thr Trp Lys Glu Met Gln
2092     130                 135                 140
2093 Leu Asn Gly Thr Leu Glu Tyr Gly Ser Met Gly Leu Ile Ile Leu Glu
2094 145                 150                 155                 160
2095 Phe Leu Thr Pro Leu Thr Phe Leu Arg Ser Met Ile Val Ser Glu Leu
2096                 165                 170                 175
2097 Thr Val Arg Arg Met His Leu Phe Val Val Phe Leu Gly Ile Phe (Xaa)
2098             180                 185                 190
```

E-->

see p. 3 for err explanation

```
2099 Val His Phe Leu Ile Arg Lys Asn Trp Tyr Leu Pro Ala Pro Glu Val
2100         195                 200                 205
2101 Ser Pro Arg Asn Pro Pro His Phe Arg Leu Ile Ser Lys Glu Gln Thr
2102         210                 215                 220
2103 Pro Trp Asp Ser Ile Lys Leu Thr Phe Glu Ala Thr Gly Ser
2104 225                 230                 235
```

●

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: **US/10/002,631B**

Input Set : **A:\10002631sequencelisting.txt**
Output Set: **N:\CRF4\02112003\J002631B.raw**

Use of n's or Xaa's(NEW RULES):
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which
residue n or Xaa represents.

```
Seq#:1; N Pos. 608,682,724,735,743,746,747,753,754,771,782,784,798,800,804
Seq#:1; N Pos. 811,812,819,821,824,825,827,834,837,844,857,859,867,869,876
Seq#:1; N Pos. 878,880,881,883,884
Seq#:2; Xaa Pos. 1,2,3,5,6,8,9,13,16,17,19,20,21,22,24,27,28,29,34,38,43,44
Seq#:2; Xaa Pos. 46,47,50,53,67,92
Seq#:9; N Pos. 545,615,629,650,656,669,726,746,753,755,757
Seq#:10; Xaa Pos. 5,6,8,15,34,38,40,47,52,75
Seq#:13; N Pos. 527,638,682,685,703,734,746,766,805,810,831,832,841,846,849
Seq#:13; N Pos. 856,858,867,888,895,897,900,901,904,910,916,931,932,933,938
Seq#:13; N Pos. 945
Seq#:14; Xaa Pos. 2,4,6,14,15,18,25,28,31,32,37,43,44,57,64,68,84,100,135
Seq#:15; N Pos. 571
Seq#:19; N Pos. 634,662,689,700,710,721,758,783,804,840,859,884,885,889,919
Seq#:20; Xaa Pos. 3,12,14,29,41,48,56,71,73,76,84,93
Seq#:25; N Pos. 582,602
Seq#:26; Xaa Pos. 26,33
Seq#:27; N Pos. 613,651,695,749,757,769,776,785,787,812,818,830,853,874,882
Seq#:27; N Pos. 908,915
Seq#:28; Xaa Pos. 1,3,12,14,20,27,31,33,40,41,44,46,50,53,67,82,93
Seq#:29; N Pos. 611,636,663,720,772,814,823,843,874,876,885,896,908,909,916
Seq#:29; N Pos. 928
Seq#:30; Xaa Pos. 1,8,12,16,19,30,70,87,96,104
Seq#:31; N Pos. 610,628,686,747,781,789,795,821,842,871,893,897,918
Seq#:32; Xaa Pos. 1,8,16,32,40,42,45,56,75,94,100
Seq#:33; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825
Seq#:33; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876
Seq#:33; N Pos. 877,884,889,891,898,908,913,914,915
Seq#:34; Xaa Pos. 1,3,6,9,11,13,14,15,16,18,19,20,21,23,25,27,28,31,33,34
Seq#:34; Xaa Pos. 36,37,41,43,48,49,57,59,103
Seq#:35; N Pos. 596,610,735,740,767,771,786,790,803,805,815,816,817,819,825
Seq#:35; N Pos. 834,835,842,847,848,854,857,858,859,861,863,870,871,875,876
Seq#:35; N Pos. 877,884,889,891,898,908,913,914,915
Seq#:37; N Pos. 586
Seq#:39; N Pos. 634,653,690,696,726,731,744,765,772,780,790,802,832,855,872
Seq#:39; N Pos. 880,895,896
Seq#:40; Xaa Pos. 1,9,15,22,40,45,51,55,57,67,69,81,86
Seq#:41; N Pos. 200,211
Seq#:42; Xaa Pos. 121,125
Seq#:47; N Pos. 7,9,12,14,15,20,21,35,36,37,38,76,103,115,120,121,185,190
Seq#:47; N Pos. 192,198,205,209,237,243,248,260,267,269,272,287,290,297,298
Seq#:47; N Pos. 300,303,305,314,315,316,320,326,331,332,333,341,342,352,353
Seq#:47; N Pos. 359,364,365,368,378,383,385,400,414,440,476,487,497,524,545
Seq#:47; N Pos. 550,590,594
```

```
Seq#:48; Xaa Pos. 2,3,17,24,33,40,52,61,70,71,73,76,77,79,81,83,86,88,90,92
Seq#:48; Xaa Pos. 95,96,97,98,100,101,106,107,108,110,114,116,118,127,128
Seq#:48; Xaa Pos. 131,133,135,155,156,157,169,182,183,188,190,191,192
Seq#:49; N Pos. 191,538
Seq#:50; Xaa Pos. 107
Seq#:51; N Pos. 512,547,555,563,580,614,624,625,630,632,639,650,666,670,671
Seq#:51; N Pos. 672,674,679,680,682,684,685,686,693,697,701,702,705,706,708
Seq#:51; N Pos. 712,713,714,715,720,721,723,726,728,730,731,734,735,737,740
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/002,631B**

DATE: 02/11/2003
TIME: 10:44:57

Input Set : **A:\10002631sequencelisting.txt**
Output Set: **N:\CRF4\02112003\J002631B.raw**

```
L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:600
M:341 Repeated in SeqNo=1
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:540
M:341 Repeated in SeqNo=9
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:480
M:341 Repeated in SeqNo=13
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:540
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:600
M:341 Repeated in SeqNo=19
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
M:341 Repeated in SeqNo=20
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:540
M:341 Repeated in SeqNo=25
L:702 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16
M:341 Repeated in SeqNo=26
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:600
M:341 Repeated in SeqNo=27
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:600
M:341 Repeated in SeqNo=29
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
M:341 Repeated in SeqNo=30
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:600
M:341 Repeated in SeqNo=31
L:921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
M:341 Repeated in SeqNo=32
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:540
M:341 Repeated in SeqNo=33
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
M:341 Repeated in SeqNo=34
L:1060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:540
M:341 Repeated in SeqNo=35
L:1110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:540
L:1166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:600
M:341 Repeated in SeqNo=39
L:1183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
M:341 Repeated in SeqNo=40
L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:180
L:1271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:112
L:1375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
M:341 Repeated in SeqNo=47
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/002,631B**

DATE: 02/11/2003
TIME: 10:44:57

Input Set : **A:\10002631sequencelisting.txt**
Output Set: **N:\CRF4\02112003\J002631B.raw**

L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
M:341 Repeated in SeqNo=48
L:2097 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:74